IN THE CLAIMS:

The following amendment relates to the claims 1 through 36 found in the Annex to the International Preliminary Examination Report, and incorporates claims 37-62.

1. (Original) A method for interoperating a first station using a first communication scheme and comprising a first coder and a first decoder with a second station using a second communication scheme and comprising a second coder and a second decoder, wherein communication between the first and second stations is conducted by transmitting signal-coding, parameters from the coder of one of the first and second stations to the decoder of the other of said first and second stations, said method comprising:

encoding a sound signal using the first coder to generate signal-coding parameters according to the first communication scheme;

receiving A request to transmit the signal-coding parameters from said one station to the other station using said second communication scheme;

in response to said request, dropping a portion of the signal-coding parameters encoded according to the first communication scheme and transmitting to the decoder of the other station the remaining signal-coding parameters, wherein dropping a portion of the signal-coding parameters comprises dropping fixed codebook indices; and

generating replacement signal-coding parameters to replace said portion of the signal-coding parameters and decoding, in the decoder of said other station, the signal-coding parameters.

2. (Original) A method as defined in claim 1, wherein receiving a request comprises:

receiving a request to transmit the signal-coding parameters from said one station to the other station using a half-rate communication mode.

3. (Original) A method as defined in claim 1, wherein the first communication scheme is CDMA2000 VBR-WB and the second communication scheme is AMR-WB.

4. (Original) A method as defined in claim 1, wherein decoding the signal-coding parameters comprises: operating the decoder of said other station in a full-rate mode.

5. (Original) A method as defined in claim 1, wherein generating replacement signal-coding parameters comprises:

randomly generating replacement signal-coding parameters to replace said portion of the signal-coding parameters.

6. (Original) A method as defined in claim 1, wherein: generating replacement signal-coding parameters comprises randomly generating replacement fixed codebook indices.

7. (Original) A method as defined in claim 1, wherein: dropping a portion of the signal-coding parameters comprises inserting an identification of a communication mode; and

transmitting the remaining signal-coding parameters comprises transmitting to the decoder of said other station the communication mode identification along with the remaining signal-coding parameters.

8. (Original) A method as defined in claim 1, comprising, in the coder of said one station:

performing a fixed codebook search to determine a fixed codebook excitation; and using the determined fixed codebook excitation for updating an adaptive codebook content and filter memories for next frames.

9. (Original) A method for interoperating a first station using a first communication scheme and comprising a first coder and a first decoder with a

second station using a second communication scheme and comprising a second coder and a second decoder, wherein communication between the first and second stations is conducted by transmitting signal-coding parameters related to a sound signal from the coder of one of the first and second stations to the decoder of the other of said first and second stations, the method comprising:

classifying the sound signal to determine whether the signal-coding parameters should be transmitted from the coder of said one station to the decoder of the other station using a first communication mode in which full bit rate is used for transmission of the signal-coding parameters;

receiving a request to transmit the signal-coding parameters from the coder of said one station to the decoder of the other station using a second communication mode designed to reduce bit rate during transmission of the signal-coding parameters;

when classification of the sound signal determines that the signal-coding parameters should be transmitted using the first communication mode, and when the request to transmit the signal-coding parameters using the second communication mode is received, dropping a portion of the signal-coding parameters from the coder of said one station and transmitting to the decoder of the other station the remaining signal-coding parameters using the second communication mode, wherein dropping a portion of the signal-coding parameters comprises dropping fixed codebook indices.

10. (Original) A method as defined in claim 9, wherein receiving a request comprises:

receiving a request to transmit the signal-coding parameters from the coder of said one station to the decoder of the other station using a half-rate. communication mode.

11. (Original) A method as defined in claim 9, wherein:

dropping a portion of the signal-coding parameters from the coder of said one station comprises inserting an identification of the second communication mode; and

transmitting the remaining signal-coding parameters comprises transmitting to the decoder of said other station the identification of the second communication mode along with the remaining signal-coding parameters.

12. (Original) A method as defined in claim 9, further comprising regenerating said portion of the signal-coding parameters and decoding, in the decoder of said other station, said signal-coding parameters into the sound signal.

13. (Original) A method as defined in claim 12, wherein regenerating said portion of the signal-coding parameters comprises randomly regenerating said portion of the signal-coding parameters.

14. (Original) A method for transmitting signal-coding parameters from a first station to a second station, comprising:

in one of said first and second stations, coding the sound signal in accordance with a full-rate communication mode;

receiving a request to transmit the signal-coding parameters from said one station to the other station of said first and second stations using a second communication mode designed to reduce bit rate during transmission of said signal-coding parameters;

in response to the request, converting the signal-coding parameters coded in full-rate communication mode to signal-coding parameters coded in the second communication mode, wherein converting the signal-coding parameters coded in full-rate communication mode to signal-coding parameters coded in the second communication mode comprises dropping a portion of the signal-coding parameters, and wherein dropping a portion of the signal-coding parameters comprises dropping fixed codebook indices; and

transmitting the signal-coding parameters coded in the second communication mode to the other of said first and second stations.

15. (Original) A method as defined in claim 14, wherein receiving the request comprises:

receiving a request to transmit the signal-coding parameters from said one station to the other station using a half-rate communication mode.

16. (Original) A method as defined in claim 14, wherein:

converting the signal-coding parameters coded in full-rate communication mode to signal-coding parameters coded in the second communication mode comprises inserting an identification of the second communication mode; and

transmitting the signal-coding parameters coded in the second communication mode to the other of said first and second stations comprises transmitting to the other station the identification of the second communication mode along with the non-dropped signal-coding parameters.

17. (Original) A method as defined in claim 14, further comprising regenerating said portion of the signal-coding parameters and, in the decoder of said other station, decoding said signal-coding parameters.

18. (Original) A method as defined in claim 17, wherein regenerating said portion of the signal-coding parameters comprises randomly regenerating said portion of the signal-coding parameters.

19. (Original) A system for interoperating a first station using a first communication scheme and comprising a first coder and a first decoder with a second station using a second communication scheme and comprising a second coder and a second decoder, wherein communication between the first and second stations is conducted by transmitting signal-coding parameters from the coder of one of the first and second stations to the decoder of the other of said first and second stations, said system comprising:

means for encoding a sound signal using the first coder to generate signal - coding parameters according to the first communication scheme;

means for receiving a request to transmit signal-coding parameters from said one station to the other station using said second communication scheme;

means for dropping, in response to said request, a portion of the signal-coding parameters encoded according to the first communication scheme and

means for transmitting to the decoder of the other station the remaining signal-coding parameters, wherein the means for dropping a portion of the signal-coding parameters comprises means for dropping fixed codebook indices; and

means for generating replacement signal-coding parameters to replace said portion of the signal-coding parameters and means for decoding, in the decoder of said other station, the signal-coding parameters.

20. (Original) A system as defined in claim 19, wherein the request receiving means comprises:

means for receiving a request to transmit the signal-coding parameters from said one station to the other station using a half-rate communication mode.

21. (Original) A system as defined in claim 19, wherein the first communication scheme is CDMA2000 VBR-WB and the second communication scheme is AMR-WB.

22. (Original) A system as defined in claim 19, comprising means for operating the decoder of said other station in a full-rate mode.

23. (Original) A system as defined in claim 19, wherein the means for generating replacement signal-coding parameters comprises:

means for randomly generating replacement signal-coding parameters.

24. (Original) A system as defined in claim 19, wherein:

the means for generating replacement signal-coding parameters comprises means for randomly generating replacement fixed codebook indices.

25. (Original) A system as defined in claim 19, wherein:

the means for dropping a portion of the signal-coding parameters comprises means for inserting an identification of the communication mode; and

the means for transmitting the remaining signal-coding parameters comprises means for transmitting to the decoder of said other station the communication mode identification along with the remaining signal-coding parameters.

26. (Original) A system as defined in claim 19, comprising, in the coder of said one station:

means for performing a fixed codebook search to determine a fixed codebook excitation; and

means for updating an adaptive codebook content and filter memories for next frames using the determined fixed codebook excitation.

27. (Original) A system for interoperating a first station using a first communication scheme and comprising a first coder and a first decoder with a second station using a second communication scheme and comprising a second coder and a second decoder, wherein communication between the first and second stations is conducted by transmitting signal-coding parameters related to a sound signal from the coder of one of the first and second stations to the decoder of the other of said first and second stations, the system comprising:

means for classifying the sound signal to determine whether the signal-coding parameters should be transmitted from the coder of said one station to the decoder of the other station using a first communication mode in which full bit rate is used for transmission of the signal-coding parameters;

means for receiving a request to transmit the signal-coding parameters from the coder of said one station to the decoder of the other station using a second communication mode designed to reduce bit rate during transmission of the signal-coding parameters;

means for dropping, when classification of the sound signal determines that the signal-coding parameters should be transmitted using the first communication mode and when the request to transmit the signal-coding parameters using the second communication mode is received, a portion of the signal-coding parameters from the coder of said one station and transmitting to the decoder of the other station the remaining signal-coding parameters using the second communication mode, wherein the means for dropping a portion of the signal-coding parameters comprises means for dropping fixed codebook indices.

28. (Original) A system as defined in claim 33, wherein the request receiving means comprises:

means for receiving a request to transmit the signal-coding parameters from the coder of said one station to the decoder of the other station using a half-rate communication mode.

29. (Original) A system as defined in claim 27, wherein:

the means for dropping a portion of the signal-coding parameters from the coder of said one station comprises means for inserting an identification of the second communication mode; and

the means for transmitting the remaining signal-coding parameters comprises means for transmitting to the decoder of said other station the identification of the second communication mode along with the remaining signal-coding parameters.

30. (Original) A system as defined in claim 27, further comprising means for regenerating said portion of the signal-coding parameters and the decoder of said other station for decoding said signal-coding parameters into the sound signal.

31. (Original) A system as defined in claim 30, wherein the means for regenerating said portion of the signal-coding parameters comprises means for randomly regenerating said portion of the signal-coding parameters.

32. (Original) A system for transmitting signal-coding parameters from a first station to a second station, comprising:

in one of said first and second stations, a coder for coding the sound signal in accordance with a full-rate communication mode;

means for receiving a request to transmit the signal-coding parameters from said one station to the other station of said first and second stations using a second communication mode designed to reduce bit rate during transmission of said signal-coding parameters;

means for converting, in response to the request, the signal-coding parameters coded in full-rate communication mode to signal-coding parameters

coded in the second communication mode, wherein the means for converting the signal-coding parameters coded in full-rate communication mode to signal- coding parameters coded in the second communication mode comprises means for dropping a portion of the signal-coding parameters, and wherein the means for dropping a portion of the signal-coding parameters comprises means for dropping fixed codebook indices; and

means for transmitting the signal-coding parameters coded in the second communication mode to the other of said first and second stations.

33. (Original) A system as defined in claim 32, wherein the request receiving means comprises:

means for receiving a request to transmit the signal-coding parameters from said one station to the other station using a half-rate communication mode.

34. (Original) A system as defined in claim 32, wherein:

the means for converting the signal-coding parameters coded in full-rate communication mode to signal-coding parameters coded in the second communication mode comprises means for inserting an identification of the second communication mode; and

the means for transmitting the signal-coding parameters coded in the second communication mode to the other of said first and second stations comprises means for transmitting to the other station the identification of the second communication mode along with the non-dropped signal-coding parameters.

35. (Original) A system as defined in claim 32, further comprising means for regenerating said portion of the signal-coding parameters and the decoder of said other station for decoding said signal-coding parameters.

36. (Original) A method as defined in claim 35, wherein the means for regenerating said portion of the signal-coding parameters comprises means for randomly regenerating said portion of the signal-coding parameters.

37. (New) A method for use by a communication device, comprising:

speech coding a portion of a digital speech signal to create a first frame comprised of a plurality of signal coding parameters; and

altering the first frame by dropping at least one signal-coding parameter from the first frame according to at least one criterion so as to form a second frame having a reduced number of signal coding parameters as compared to the first frame, the criterion being established in response to a bit budget for a current frame, the bit budget available for any given frame not being fixed in time.

38. (New) A method as in claim 37, further comprising receiving at least a portion of the second frame at a communication device.

39. (New) A method to perform a system interface interoperability function, comprising:

receiving a frame of signal-coding parameters generated at a first communication device, the first communication device comprising a speech coder operating according to a first set of speech coding rules;

dropping at least one of the signal-coding parameters from the received frame to form an altered frame; and

transmitting at least part of the altered frame to a second communications device, said second communications device comprising a speech decoder operating according to a second set of speech coding rules and operable to generate a plurality of sound signal samples based at least in part on remaining signal-coding parameters of the altered frame, said first set of speech coding rules being different from said second set of speech coding rules.

40. (New) A method to perform a system interface interoperability function, comprising:

inputting a frame comprised of a plurality of signal-coding parameters; and

removing at least one signal-coding parameter from a frame comprised of a

plurality of signal-coding parameters to form an altered frame, at least part of the altered frame usable for generation of a plurality of sound signal samples.

41. (New) The method of claim 40, further comprising transmitting said altered frame.

42. (New) A speech encoder operable in accordance with a first speech coding scheme, comprising an encoder to encode at least one inactive speech frame into at least one encoded frame, at least part of said at least one encoded frame being transmittable to a speech decoder and being directly usable by the speech decoder, said speech decoder operating in accordance with a second speech coding scheme different from said first speech coding scheme.

43. (New) The speech encoder of claim 42, said at least part of said at least one encoded frame being directly usable by the speech decoder comprising at least one Immitance Spectral Frequency parameter.

44. (New) A speech decoder operable in accordance with a first speech coding scheme, said speech decoder operable to decode at least one inactive speech frame having signal coding parameters that were generated with a speech encoder operable in accordance with a second speech coding scheme different from said first speech coding scheme.

45. (New) A method to perform a system interface interoperability function, comprising:
   receiving a frame comprised of signal coding parameters; and
   increasing a content of the frame by inserting at least one random signal coding parameter.

46. (New) A method to perform a system interface interoperability function, comprising:
   receiving a frame comprised of signal coding parameters; and

increasing a content of the frame by copying at least one of the signal coding parameters.

47. (New) A method for speech decoding, comprising:

receiving a frame comprised of signal coding parameters, at least one signal coding parameter being randomly generated to compensate for at least one previously removed signal coding parameter; and

decoding the signal coding parameters.

48. (New) A speech decoder, comprising:

an input for receiving a frame comprised of signal coding parameters, at least one signal coding parameter being randomly generated to compensate for at least one previously removed signal coding parameter; and

a decoder for decoding the signal coding parameters to output a reconstructed speech signal.

49. (New) A speech decoder, comprising:

an input for receiving at least one frame comprised of signal coding parameters,

at least part of the decoder capable of processing a frame that includes at least one signal coding parameter that was inserted into an original lower rate frame to form a higher rate frame that is received; and

at least a part of the decoder for decoding the signal coding parameters to output a reconstructed speech signal.

50. (New) A speech decoder as in claim 49, where the lower rate frame is a half rate frame, and where the higher rate frame is a full rate frame.

51. (New) A computer software product embodied on a computer readable medium and comprising program instructions usable by a communication device to perform operations comprising:

speech coding a portion of a digital speech signal to create a first frame

comprised of a plurality of signal coding parameters; and

altering the first frame by dropping at least one signal-coding parameter from the first frame according to at least one criterion so as to form a second frame having a reduced number of signal coding parameters as compared to the first frame, the criterion being established in response to a bit budget for a current frame, the bit budget available for any given frame not being fixed in time.

52. (New) A computer software product embodied on a computer readable medium and comprising program instructions usable by a communication device to perform operations comprising:

receiving a frame of signal-coding parameters generated at a first communication device, the first communication device comprising a speech coder operating according to a first set of speech coding rules;

dropping at least one of the signal-coding parameters from the received frame to form an altered frame; and

transmitting at least part of the altered frame to a second communications device.

53. (New) A computer software product as in claim 52, said second communications device comprising a speech decoder operating according to a second set of speech coding rules and operable to generate a plurality of sound signal samples based at least in part on remaining signal-coding parameters of the altered frame, said first set of speech coding rules being different from said second set of speech coding rules.

54. (New) A computer software product embodied on a computer readable medium and comprising program instructions to perform a system interface interoperability function, comprising operations of:

inputting a frame comprised of a plurality of signal-coding parameters; and

removing at least one signal-coding parameter from a frame comprised of a plurality of signal-coding parameters to form an altered frame, at least part of the altered frame usable for generation of a plurality of sound signal samples.

55. (New) A computer software product as in claim 54, further comprising transmitting said altered frame.

56. (New) A computer software product embodied on a computer readable medium and comprising program instructions to perform a system interface interoperability function, comprising operations of:
receiving a frame comprised of signal coding parameters; and
increasing a content of the frame by at least one of inserting at least one random signal coding parameter and copying at least one of the signal coding parameters.

57. (New) A speech encoder operable in accordance with a first speech coding scheme, comprising means for encoding at least one inactive speech frame into at least one encoded frame, at least part of said at least one encoded frame being transmittable to a speech decoder means and being directly usable by the speech decoder means, said speech decoder means operating in accordance with a second speech coding scheme different from said first speech coding scheme.

58. (New) The speech encoder of claim 57, at least part of said at least one encoded frame being directly usable by the speech decoder means comprises at least one Immitance Spectral Frequency parameter.

59. (New) A speech decoder operable in accordance with a first speech coding scheme, said speech decoder comprising means for decoding at least one inactive speech frame having signal coding parameters that were generated with a speech encoder means in accordance with a second speech coding scheme different from said first speech coding scheme.

60. (New) A speech decoder, comprising:
means for receiving a frame comprised of signal coding parameters, at least one signal coding parameter being randomly generated to compensate for at least one previously removed signal coding parameter; and

means for decoding the signal coding parameters to output a reconstructed speech signal.

61. (New) A speech decoder, comprising:

means for receiving at least one frame comprised of signal coding parameters,

means for processing a frame that includes at least one signal coding parameter that was inserted into an original lower rate frame to form a higher rate frame that is received; and

means for decoding the signal coding parameters to output a reconstructed speech signal.

62. (New) A speech decoder as in claim 61, where the lower rate frame is a half rate frame, and where the higher rate frame is a full rate frame.